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THE ZOOLOGIST:

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OF

NATURAL HISTORY

AND

JOURNAL FOR RECORDING FACTS & ANECDOTES

RELATING TO

QUADRUPEDS, BIRDS, REPTILES, FISHES, ANNELIDES,

INSECTS, WORMS, ZOOPHYTES, &c.

THEIR HABITS, FOOD, RETREATS, OCCASIONAL APPEARANCE,

MIGRATIONS, NESTS AND YOUNG.

No. CLXXXIV.

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To Subscribers.

Subscribers to the 'Zoologist' are respectfully informed that prepayment may be made, as heretofore, before the 20th of December; the sum of Twelve Shillings, in postage stamps, or by Post-Office order, MADE PAYABLE IN BISHOPSGATE STREET, securing the delivery on the 1st of every month, without any cost or trouble to the receiver. The prepayment includes all double numbers, and *must* be made before the 20th of December.

DOUBLE NUMBER.—I cannot do justice to contributors without publishing a double number on the 1st of January. It will contain papers by the Rev. P. H. Newnham, M.A.; the Rev. Alfred Merle Norman, M.A.; the Rev. C. A. Smith, M.A.; the Rev. W. T. Bree, M.A.; Alfred R. Wallace, Esq.; George Wailes, Esq.; and a number of my best contributors. In addition to these, Mr. Brown's account of the economy of *Acentria nivea* will appear as part of the Proceedings of the Northern Entomological Society; also a notice of the 'Insect Hunters,' contributed by a leading entomologist.

MR. STANTON'S ANNUAL.—The 'Annual' will be published as usual, and will be forwarded, post free, on receipt of 30 penny postage stamps. There is no shilling edition.

Zoologist for 1858	12s.
Insect Hunters	1s. 6d.
Annual	2s. 6d.
	16s.

This day is published, price One Shilling,

AN ESSAY ON THE EMPLOYMENT OF PHYSIOLOGICAL CHARACTERS in the CLASSIFICATION of ANIMALS. By EDWARD NEWMAN, F.L.S., &c., &c. Printed by order of the Committee of the Greenwich Natural History Club.

JOHN VAN VOORST, 1, Paternoster Row.

Quatrefages' Naturalist's Rambles.

Just published, in two vols. post 8vo, price 15s. cloth,

THE RAMBLES OF A NATURALIST ON THE COAST OF FRANCE, SPAIN, AND SICILY. By A. DE QUATREFAGES, Member of the Institute, Professor of Ethnology in the Museum of Natural History, Jardin des Plantes, Paris, &c. Translated, with the Author's sanction and co-operation, by E. C. OTT, Honorary Member of the Literary and Philosophical Society of St. Andrews.

London: LONGMAN, BROWN & Co., Paternoster.

This day is published, with EIGHT COLOURED PLATES, price 12s. 6d.,

THE NATURAL HISTORY OF THE TINEINA, containing LITHOCOLLETIS, Part I.

By H. T. STANTON, assisted by PROFESSOR ZELLER and J. W. DOUGLAS.

London: JOHN VAN VOORST, 1, Paternoster Row.

To be Sold,

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that are on the ocean at this time of year, they had better cross the Atlantic and judge for themselves. There are not only many, but there must be immense numbers, or so many would not be observed from one ship. I speak more particularly of the shearwaters (the species I am not certain of).

Another point about which I have been thinking is, that the storm petrels (*Thalassidromæ*) have the credit of being precursors of stormy weather. Now, there is no doubt that they are seen in greatest numbers when the sea is rough, as I have myself observed; in fact, it is unusual to see any in a calm sea; but the explanation appears simple enough, viz., that they only resort to those parts of the ocean where the water is being stirred up by the wind, because their natural food (marine plants and animals), which during a smooth sea might float at a little distance from the surface, are on such occasions continually thrown to the surface, within reach of these birds.

* * * * *

On board ship 'Prince of Wales,'
Hudson's Bay, Aug. 5.

We are now in the "Bay," after having passed through the difficult passage of Hudson's Straits, the entrance of which being the first land we made, on the 24th of July, after having experienced contrary winds among the icebergs in Davis's Strait. Hudson's Strait was particularly free of ice this season, the only part where we met with it thick being about the middle, where we lay for three days, made fast among the field-ice. This sailing among ice requires considerable care and judgment, and it is rather alarming to the nerves, striking a large block, and making the ship creak and rattle as if she was going to pieces; this, however, is an occurrence of every few minutes when boring through the ice. The ships are extra planked all round with very thick pieces on the bows. Sailing among the ice on a clear day, with the water calm (as it necessarily is among the ice), is, however, pleasant. The nights are very cold, and the thermometer during the day often not much above freezing point.

Animal life in the "Straits" was confined to a good many seals, a few walruses, one polar bear, a number of what I took for the foolish guillemot (*Uria troile*), a few, but very few, of the black guillemot (*U. grylle*), and an occasional pair of gulls.

Something in the entomological line was observed when we were



made fast to the field of ice, viz., a moth, which I dug out of the ice. It was about three inches below the surface, and had evidently fallen there, and then thawed its way in, as any substance will do.

There is always plenty of fresh water to be found on the ice in pools, and these ships always calculate on filling up their tanks from such sources.

Since we got well into Hudson's Bay there have been no birds, save what I took for a skua (*Lestris*) at a distance to-day; nor have we yet come to any ice, excepting a few scattered pieces. The region of the large "bergs" is neither here nor in Hudson's Strait, but outside in Davis's Strait, down which they come from the far North. We saw some of all sizes, from 150 feet above water and of great extent, down to the smallest pieces. * * * We have been as high as latitude $63^{\circ} 8' N.$, and have been able to read a book clearly without the moon all night.

York Factory, Hudson's Bay,
August 20.

After knocking about in the ice for two days and a half, we arrived here on the 9th of August; and, as I was some days on board before disembarking, I amused myself with several trips to the "mud flats" during low water, where I shot a few sandpipers and gulls.

York Factory is composed of a number of stores, dwelling-houses, &c., enclosed with palisading in form of a square of 200-yard sides. It is situate on a point of land between two rivers, and this point is covered with scrub spruce, poplar, aspen, and other trees and shrubs, and is of a very boggy nature. * * * The extremes of heat and cold are experienced to a great degree, and suddenness of change in the weather is a feature in the climate, caused, no doubt, by the great quantity of ice which remains all the summer in Hudson's Bay. Mosquitoes and other flies swarm in summer, but by this time they have thinned off considerably.

Stormy weather has commenced, but I expect that we shall have better weather as we proceed inland, which, however, will most likely be slow work, on account of the low state of the water in the rivers flowing this way, caused by the unusually dry and hot summer which has been experienced here this year; in fact, I am told by those who have been in the country for many years that this is the driest summer they have ever known.

I have been very hospitably entertained at the Fort since my arrival. The officers of the Company and people on their way up the

country all mess together in one large room, and our usual fare is white fish, carebon venison, buffalo tongues, wild ducks and geese, plover, &c., besides which we have eaten one beaver, and to-morrow shall make a sturgeon look foolish I have no doubt.

I ought to add that the 'Letters of Rusticus' have afforded me much amusement as well as instruction during my passage across the Atlantic.

"To the West" is the cry.

T. W. BLAKISTON.

A Systematic List of Coleoptera found in the Vicinity of Alverstoke, South Hants. By ARTHUR ADAMS, Esq., F.L.S., Surgeon of H.M. Surveying Ship 'Actæon;' and WILLIAM BALFOUR BAIKIE, M.D., F.R.G.S.

(Continued from page 5821).

RHYNCOPHORA.

1. Fam. BRUCHIDÆ, *Leach.*

1. *Bruchus*, *Geoff., Steph.*

B. Cisti, *Fabr., Walt.* *B. canus*, *B. tibialis*, *B. debilis*, *Steph.*
Abundant on broom.

2. *Brachytarsus*, *Schönh., Steph.*

B. scabrosus, *Fabr., Steph., Walt.* A specimen captured at Haslar by Mr. C. Barron.

2. Fam. ATTELABIDÆ, *Westw.*

1. Sub-fam. *Rhynchininæ.*

1. *Rhynchites*, *Herbst, Steph.*

R. Betulæ, *Linn., Walt.* *Deporaus Betulæ*, *Leach, Steph.* Local and not abundant; at Grange, on birches when in full flower.

R. megacephalus, *Germ., Walt.* *R. lævicollis*, *R. cyaneopennis*, *Steph.* Rather scarce.

R. æquatus, *Linn., Steph., Walt.* On flowers of the hawthorn.

R. æneovirens, *Marsh., Steph., Walt.* Hedges, by beating; scarce.

2. Sub-fam. *Apioninæ*.2. *Apion*,* *Herbst*, *Steph.*

- A. Craccæ*, *Linn.*, *Steph.*, *Walt.* On *Vicia cracca* and in hedges.
A. Pomonæ, *Fabr.*, *Steph.*, *Walt.* Not uncommon.
A. subulatum, *Kirby*, *Steph.*, *Walt.* Occasional.
A. violaceum, *Kirby*, *Steph.*, *Walt.* Common; meadows, by sweeping.
A. Hydrolapathi, *Kirby*, *Steph.*, *Walt.* Occasional, on *Rumices*.
A. frumentarium, *Linn.*, *Walt.* *A. hæmatodes*, *Steph.* Common; especially in grass, and on the great dock.
A. rubens, *Ing.*, *Steph.*, *Walt.* Rather scarce.
A. Onopordi, *Kirby*, *Steph.*, *Walt.* Occasional.
A. Radiolus, *Marsh.*, *Steph.*, *Walt.* Rather common.
A. æneum, *Fabr.*, *Steph.*, *Walt.* Not rare.
A. Carduorum, *Kirby*, *Steph.*, *Walt.* Abundant.
A. rufiostre, *Fabr.*, *Steph.*, *Walt.* Common; on *Malva sylvestris*.
A. striatum, *Marsh.*, *Steph.*, *Walt.* Occasional.
A. Ervi, *Kirby*, *Steph.*, *Walt.* Not common.
A. virens, *Herbst*, *Steph.*, *Walt.* Occasional; in grassy places.
A. Loti, *Kirby*, *Steph.*, *Walt.* On *Lotus corniculatus*; occasional.
A. flavipes, *Fabr.*, *Steph.*, *Walt.* In fields; common.
A. assimile, *Kirby*, *Steph.*, *Walt.* Abundant; among grass.
A. Trifolii, *Linn.*, *Walt.* *A. æstivum*, *Steph.* In grassy places; not frequent.
A. varipes, *Germ.*, *Steph.*, *Walt.* Not rare.
A. ebeninum, *Kirby*, *Steph.*, *Walt.* Occasionally in fields, by sweeping.
A. Pisi, *Meg.*, *Steph.*, *Walt.* Not common.

3. *Oxystoma*, *Dum.*, *Steph.*

- O. fuscistrotris*, *Fabr.*, *Steph.*, *Walt.* On furze.
O. Ulicis, *Fost.*, *Steph.*, *Walt.* On broom and furze; common.
O. Genistæ, *Kirby*, *Steph.*, *Walt.* On broom; less common.

3. Fam. *CURCULIONIDÆ*, *Leach*.1. Sub-fam. *Brachycerinæ*.1. *Cneorhinus*, *Schönh.* *Philopedon*, *Steph.*

* Many of our species of *Apion* have been kindly compared and determined for us by G. R. Waterhouse, Esq.

C. geminatus, *Fabr.*, *Steph.*, *Walt.* *C. scrobiculatus*, *Steph.* On bushes in copses.

C. exaratus, *Marsh.*, *Steph.*, *Walt.* *C. plumbeus*, *Marsh.* On *Arundo arenaria* in Hayling Island.

2. *Strophosomus*, *Billb.*, *Steph.*

S. Coryli, *Fabr.*, *Steph.*, *Walt.* On hazel; common.

S. Faber, *Herbst*, *Walt.* *S. pilosellus*, *Steph.* Under loose stones on banks at Browndown.

3. *Sciaphilus*, *Schönh.*, *Steph.*

S. muricatus, *Fabr.*, *Steph.*, *Walt.* In hedges, by sweeping.

4. *Tanymecus*, *Germ.*, *Steph.*

T. palliatus, *Fabr.*, *Steph.*, *Walt.* In hedges; rather scarce.

5. *Sitones*, *Germ.*, *Schönh.* *Sitona*, *Germ.*, *Steph.*

S. hispidulus, *Fabr.*, *Steph.*, *Walt.* Very common.

S. regensteiniensis, *Herbst*, *Steph.*, *Walt.* Common; on furze.

S. lineatus, *Linn.*, *Steph.*, *Walt.* In hedges; common.

S. flavescens, *Marsh.* (var.), *Steph.* *S. caninus*, *S. nigriclavus*,

S. longiclavus, *Steph.* In meadows, by sweeping.

S. tibialis, *Herbst.* In meadows, by sweeping.

6. *Polydrosus*, *Germ.*, *Steph.*

P. pterygomalis, *Schönh.* In hedges, by sweeping; rare.

P. confluens, *Kirby*, (var.) *Steph.* *P. chrysomela*, *Steph.* In grassy places; occasional.

2. Sub-fam. *Cleoninae*.

7. *Cleonus*, *Meg.*, *Steph.*

C. sulcirostris, *Linn.*, *Steph.*, *Walt.* Rare; first taken on thistles near Stokes Bay, by Master H. B. Adams.

8. *Alophus*, *Schönh.*, *Steph.*

A. triguttatus, *Fabr.*, *Steph.*, *Walt.* Rather scarce; on field-paths.

9. *Liophlaeus*, *Germ.*, *Steph.*

L. nubilus, *Fabr.*, *Steph.*, *Walt.* Roadsides and paths; scarce.

10. *Barynotus*, *Germ.* *Merionus*, *Steph.*

B. obscurus, *Fabr.*, *Steph.*, *Walt.* Occasional.

B. mærens, *Fabr.*, *Walt.* *B. elevatus*, *Steph.* In old hedges, by beating.

3. Sub-fam. *Molytinæ*.11. *Hylobius*, *Schönh.*, *Steph.*

H. Abietis, *Linn.*, *Steph.*, *Walt.* Common; among felled trees and in houses.

12. *Molytes*, *Schönh.*, *Steph.*

M. coronatus, *Latr.*, *Steph.*, *Walt.* On chalky banks and in old hedge-rows; not unfrequent.

13. *Leiosomus*, *Kirby*, *Steph.*

L. ovatulus, *Clairv.*, *Steph.*, *Walt.* On banks under sticks and leaves.

14. *Phytonomus*, *Schönh.* *Hypera*, *Steph.*

P. punctatus, *Fabr.*, *Steph.*, *Walt.* Fields and hedges; very common.

P. Polygoni, *Fabr.*, *Steph.*, *Walt.* Rare; in damp places at Grange, on *Polygonum Persicaria*.

P. Rumicis, *Linn.*, *Steph.*, *Walt.* Rare; on docks in swampy spots.

P. murinus, *Fabr.*, *Steph.*, *Walt.*

P. nigrirostris, *Fabr.*, *Steph.*, *Walt.* Common; in mossy banks.

P. variabilis, *Herbst*, *Steph.*, *Walt.* *Villosulus bimaculatus*, *Steph.* In hedges, by beating; common.

4. Sub-fam. *Phyllobiinae*.15. *Phyllobius*, *Schönh.*, *Steph.*

P. Alneti, *Fabr.*, *Walt.* *P. Pyri*, *Steph.* On trees in shrubberies.

P. vespertinus, *Fabr.*, *Walt.* *P. Pyri*, *Linn.* *P. Mali*, *Steph.* On foliage at Grange.

P. argentatus, *Linn.*, *Steph.*, *Walt.* On foliage; rather rare.

P. oblongus, *Linn.*, *Walt.* (*Nemoicus*), *Steph.* Rather common; on grassy banks.

P. Pomonæ, *Oliv.*, *Steph.*, *Walt.* (var.) *albidus*, *Steph.* Common; in hedges and on banks.

P. uniformis, *Marsh.*, *Steph.*, *Walt.* *P. parvulus*, *Steph.* Very common; among grass and clover.

5. Sub-fam. *Omiinae*.16. *Trachyphlæus*, *Germ.*, *Steph.*

T. scabriculus, *Linn.*, *Steph.*, *Walt.* *T. digitalis*, *Steph.* Under stones; not common.

17. *Omius*, *Germ.*

O. hirsutulus, *Fabr.*, *Walt.* (*Brachysomus*), *Steph.* Sandy places; rare.

O. brunnipes, *Oliv.*, *Walt.* (*Otiorhynchus*), *Steph.* Under stones on damp banks and along hedge-rows; very common.

6. Sub-fam. *Otiorhynchinæ*.18. *Otiorhynchus*, *Germ.*, *Steph.*

O. sulcatus, *Fabr.*, *Steph.*, *Walt.* Under stones in sandy places and in chalk pits.

O. picipes, *Fabr.*, *Walt.* Under small stones and at roots of grass on Browdown; common.

O. rugifrons, *Gyll.*, *Steph.*, *Walt.* In hedges.

O. ovatus, *Linn.*, *Steph.*, *Walt.* Occasional; in hedges.

O. niger, *Fabr.*, *Steph.*, *Walt.* On commons, and by sweeping among tall grass; rather common.

O. scabrosus, *Marsh.*, *Steph.*, *Walt.* Not frequent.

O. ligneus, *Oliv.*, *Steph.*, *Walt.* Occasional.

7. Sub-fam. *Erirhininæ*.19. *Magdalinus*, *Germ.* *Magdalis*, *Steph.*

M. atramentarius, *Marsh.*, *Steph.*, *Walt.* *M. carbonaria*, *M. aterima*, *M. asphaltina* (♂), *Steph.* In hedges, by sweeping.

M. Pruni, *Linn.*, *Walt.* (*Rhinodes*), *Steph.* In hedges, by sweeping; rare.

20. *Erirhinus*, *Schönh.* *Notaris*, *Steph.*

E. acridulus, *Linn.*, *Steph.*, *Walt.* By sweeping among grass in swampy places.

E. bimaculatus, *Fabr.*, *Steph.*, *Walt.* Among damp grass, by sweeping.

21. *Dorytomus*, *Schönh.*, *Steph.* *Erirhinus*, *Walt.*

D. pectoralis, *Panz.*, *Steph.*, *Walt.* A single specimen taken off birch, by sweeping, at Grange.

D. Tortrix, *Linn.*, *Steph.*, *Walt.* Off herbage, by sweeping.

22. *Anthonomus*, *Germ.*, *Steph.*

A. pedicularius, *Linn.*, *Walt.*, (var.) *Steph.* On hawthorn flowers.

A. Rubi, *Herbst*, *Steph.*, *Walt.* *A. obscurus*, *Steph.* On brambles; occasional.

23. *Balaninus*, *Germ.*, *Steph.*

B. turbatus, *Gyll.*, *Steph.*, *Walt.* *B. Elephas*, *Steph.* Two specimens captured in the vicinity of Portsmouth, by C. Willcox, Esq.

B. Nucum, *Linn.*, *Steph.*, *Walt.* On hazels; not unfrequent.

B. venosus, *Germ.*, *Walt.* *O. Glandium*, *Steph.* One specimen taken near Haslar.

B. villosus, *Fabr.*, *Steph.*, *Walt.* One captured in Rowner Copse.

B. pyrrhoscerus, *Marsh.*, *Steph.*, *Walt.* Hedges, by sweeping; rare.

24. *Orchestes*, *Ill.*, *Steph.*

O. Quercus, *Linn.*, *Steph.*, *Walt.* On oaks; rather rare.

O. Alni, *Linn.*, *Steph.*, *Walt.* Rather scarce; on alders.

O. Ilicis, *Fabr.*, *Steph.*, *Walt.* *O. pubescens*, *Steph.* One specimen taken off ivy.

25. *Tachyerges*, *Schönh.*, *Steph.*

T. Salicis, *Linn.*, *Walt.* *T. Capreae*, *Steph.* On willows; rather abundant.

T. Stigma, *Germ.*, *Steph.*, *Walt.* *T. Orchestes*, *T. Populi*, *Steph.* Not abundant.

8. Sub-fam. *Cryptorhynchinae*.26. *Cryptorhynchus*, *Ill.*, *Steph.*

C. Lapathi, *Linn.*, *Steph.*, *Walt.* Not uncommon; on willows.

27. *Cæliodes*, *Schönh.*

C. Quercus, *Fabr.*, *Walt.* (*Ceutorhynchus*), *Steph.* Rare; swept off *Osmunda regalis* near oaks, at Grange.

C. ruber, *Marsh.*, *Walt.* (*Ceutorhynchus*), *Steph.* Not common.

C. Geranii, *Payk.*, *Steph.*, *Walt.* One taken by sweeping among grass.

C. didymus, *Fabr.*, *Steph.*, *Walt.* On nettles; common.

28. *Hydronomus*, *Schönh.*, *Steph.*

H. Alismatis, *Marsh.*, *Steph.*, *Walt.* Rare; on *Alisma plantago*

29. *Rhinoncus*, *Schönh.*, *Steph.*

R. pericarpus, *Fabr.*, *Steph.*, *Walt.* *R. Spartii*, *Steph.* Off hazel-bushes, by beating.

R. subfasciatus, *Gyll.*, *Walt.* *R. tibialis*, *Steph.* Occasional.

30. *Ceutorhynchus*, *Schönh.* *Nedys*, *Steph.*

C. assimilis, *Payk.*, *Steph.*, *Walt.* Common.

- C. Erysimi*, *Fabr.*, *Steph.*, *Walt.* Occasional.
C. trimaculatus, *Fabr.*, *Walt.* *C. Litura*, *Steph.* On thistles : abundant.
C. pollinarius, *Steph.*, *Walt.* Very common ; on nettles.
C. quadridens, *Panz.*, *Walt.* *C. Boraginis*, *Steph.* Occasional.
C. Echii, *Fabr.*, *Steph.*, *Walt.* Abundant on *Echium vulgare*, on Hayling Island.
C. Troglodytes, *Fabr.*, *Steph.*, *Walt.* In clover fields, by sweeping.
C. sulcicollis, *Gyll.*, *Walt.* (*Ceutorhynchus*), *Steph.* Sweeping among herbage ; common.

31. *Orobitis*, *Germ.*, *Steph.*

O. cyaneus, *Linn.*, *Steph.*, *Walt.* One specimen taken in moss.

9. Sub-fam. *Cioninæ*.

32. *Cionus*, *Clairv.*, *Steph.*

C. Scrophulariæ, *Linn.*, *Steph.*, *Walt.* On *Scrophularia nodosa* while in flower ; not very abundant.

C. Verbasci, *Fabr.*, *Steph.*, *Walt.* Very rare ; on *Verbascum Thapsus*, at Rowner and at Grange.

33. *Gymnetron*, *Schönh.*

G. Veronicæ, *Germ.*, *Walt.* Rare ; on aquatic plants in ditches at Grange.

G. Antirrhini, *Germ.*, *Walt.* (*Rhinusa*), *Steph.* Hiding in flowers of *Linaria repens* ; rather scarce.

34. *Mecinus*, *Germ.*, *Steph.*

M. Pyraster, *Herbst*, *Steph.* *M. semicylindricus*, *Steph.* In clover fields, by sweeping.

M. circulatus, *Marsh.*, *Steph.*, *Walt.* *M. hæmorrhoidalis*, *Steph.* Sweeping in meadows ; rather abundant.

35. *Nanophyes*, *Schönh.* *Sphærule*, *Steph.*

N. Lythri, *Fabr.*, *Steph.*, *Walt.* On *Lythrum salicaria* ; rather plentiful.

36. *Sitophilus*, *Schönh.* *Calandra*, *Steph.*

S. granarius, *Linn.*, *Steph.*, *Walt.* Occasional, on walls ; one taken at Grange.

4. Fam. HYLESINIDÆ, *Shuck.*1. *Hylastes*, *Erich.*, *Steph.**H. ater*, *Payk.*, *Steph.* Not common.*H. fuscescens*, *Steph.* Rare ; in old trees.2. *Hylesinus*, *Fabr.*, *Steph.**H. crenatus*, *Fabr.*, *Steph.* One specimen taken.*H. Fraxini*, *Fabr.*, *Steph.* Local ; occasionally seen flying in little clouds in the sun.5. Fam. BOSTRICHIDÆ, *Schaum.*1. *Dendroctonus*, *Erich.*, *Steph.**D. piniperda*, *Linn.*, *Steph.* A single specimen captured.2. *Scolytus*, *Geoff.*, *Steph.* *Ekkoptogaster*, *Herbst.**S. Destructor*, *Oliv.*, *Steph.* *Ekkoptogaster Scolytus*, *Herbst.* In old elms, burrowing under the bark ; common.*S. pygmæus*, *Fabr.*, *Steph.* In felled trees, under the loose bark ; rare.

WM. BALFOUR BAIKIE.

*Determination of the Species of Panorpina, Ephemerina, Hemero-
biina, &c., described by Mr. Stephens in his 'Illustrations of
British Entomology.'* By H. HAGEN, M.D.*

PANORPINA.

Boreus hiemalis, *Steph. Ill. Brit. Ent. Mand. vi. 51* = *Panorpa hiemalis* of Linneus.*Panorpa communis*, *Id. p. 52* = *P. communis* of Linneus.*Panorpa affinis* = *P. germanica* of Rambur, not of Linneus.*Panorpa apicalis* is a new species, and = the *P. montana* of Brauer.*Panorpa borealis*, *Id. p. 53.* Of this species there is no specimen.*Panorpa germanica* = *P. germanica* of Linneus.

EPHEMERINA.

Ephemerula vulgata, *Id. p. 55* = *E. vulgata* of Linneus.*Ephemerula cognata*, *Id. p. 56* = *E. danica* of Müller.

* Obligingly communicated by Dr. Gray, of the British Museum.

Ephemera Stigma = *Potamanthus marginatus* of Zetterstedt, female; and *E. talcosa* is referrible to the same species.

Ephemera lutea is the female of a new species of *Baëtis*, and *E. marginata* is the male of the same.

Ephemera submarginata, *Id.* p. 58, is the female, and *E. dispar* the subimago of the male of a new species of *Potamanthus*; it must stand as *Potamanthus dispar*.

Ephemera fusca is the male of a new species of *Potamanthus*.

Ephemera diluta. Of this species there is no example.

Ephemera apicalis, *Id.* p. 59, is a new species of *Cloe*.

Ephemera rufescens = *Potamanthus fuscus*, male and female; and *E. rosea* is the same species.

Ephemera helvipes = *Potamanthus apicalis*, female.

Ephemera dubia is the male of a new species of *Cloe*.

Ephemera minor is the female of a new species of *Potamanthus*.

Cænis macrura is a new species, male.

Cænis dimidiata, *Id.* p. 61, is the male of *C. grisea* of Pictet; *C. brevicauda* is the subimago of the female of the same species, and *C. pennata* is the imago.

Cænis Harrisella and *C. interrupta*, *Id.* p. 62, are both wanting.

Cænis chironomiformis = *Ephemera halterata* of Fabricius, female.

Baëtis dispar, *Id.* p. 63, is the male, and *B. venosa* the female, of a new species.

Baëtis longicauda, *B. costalis*, *Id.* p. 64, and *B. subfusca*, constitute a new species: *costalis* and *subfusca* are females.

Baëtis elegans is a new species, the male a subimago, the female an imago.

Baëtis semicolorata is a new species, male.

Baëtis lateralis, *Id.* p. 65, is a new species, male and female.

Baëtis obscura is the female of *Ephemera rosea*.

Baëtis carnea. There is no specimen.

Baëtis striata is the female of a new species of *Cloe*.

Baëtis bioculata, *Id.* p. 65, is the male, and *B. fuscata*, *Id.* p. 66, the female of a new species of *Cloe*.

Baëtis culiciformis = *Ephemera diptera* of Linneus, male, and *Cloe dipterum*, p. 68, are females, the imago and subimago, of the same species.

Baëtis horaria is the male, and *B. verna* the female of a new species of *Cloe*. The name *horaria* must be adopted. *B. singulata*, p. 67, is another male of the same species, and *Cloe ochraceum*, p. 68, is a female.

Baëtis autumnalis. There is no specimen.

Cloëon hyalinatum, female; *C. albipenne*, *Id.* p. 69, male; *C. unicolor*, female; and *C. Virgo*, *Id.* p. 70, female, constitute but one species: it is the *C. bioculata* of Zetterstedt.

Cloëon cognatum and *C. dimidiatum* are male and female of a new species. The first of these names must be adopted.

HEMEROBIINA.

Osmylus maculatus, *Id.* p. 99 = *Hemerobius chrysops* of Linneus.
Drepanepteryx phalænoides, p. 100 = *Hemerobius phalænoides* of Linneus.

Chrysopa fulviceps, p. 101 = *C. capitata* of Wesmael.

Chrysopa capitata, p. 102 = *C. capitata* of Schneider.

Chrysopa reticulata and *C. maculata* = *Hemerobius Perla* of Linneus.

Chrysopa abbreviata, p. 103 = *C. abbreviata* and *C. phyllochroma*.

Chrysopa immaculata = *C. abbreviata*.

Chrysopa carnea, p. 103, *C. alba*, p. 104, and *affinis* = *C. vulgaris* of Schneider.

Chrysopa ventralis, p. 103 = *C. ventralis* and *C. aspersa*.

Chrysopa angustipennis, p. 104, is a new species.

Chrysopa Perla, p. 105 = *C. vittata* of Wesmael.

Chrysopa subfalcata = *C. flava* of Scopoli.

Hemerobius hirtus, p. 106 = *H. hirtus* of Linneus and *H. variegatus*. The latter is placed as the type of the species.

Hemerobius angulatus = *H. intricatus*.

Hemerobius concinnus = *H. cylindripes* of Wesmael.

Hemerobius fuscus, p. 107, and *H. subnebulosus* = *H. nervosus* of Fabricius.

Hemerobius nebulosus, *H. Humuli*, p. 108, *H. obscurus*, *H. lutescens*, p. 109, *H. affinis*, *H. paganus*, p. 110, *H. apicalis*, *H. subfasciatus*, p. 111, *H. irroratus* = *H. Humuli* of Linneus.

Hemerobius fasciatus, p. 108, *H. perelegans*, p. 109, *H. Pini*, p. 111, *H. Stigma*, p. 112, *H. crispus* = *H. phaleratus* of Hoffmansegg.

Hemerobius nervosus = *H. nervosus* and *H. Humuli* of Linneus.

Hemerobius marginatus, p. 109, is a new species.

Hemerobius nemoralis, p. 110 = *H. paganus* of Vill.

Hemerobius punctatus, p. 111, and *H. pallidus*, p. 112 = *H. micans* of Olivier.

Hemerobius variegatus, p. 113 = *H. variegatus* of Fabricius.

Hemerobius fimbriatus, *Id.* p. 113. There is no specimen to illustrate this species.

Hemerobius elegans, p. 113, and *H. Marshami*, p. 114 = *H. pygmaeus*.

Hemerobius fuscatus, p. 114, *H. nitidulus* and *H. confinis*, p. 115 = *Sisyra fuscata* of Fabricius.

Coniopteryx tineiformis, *Id.* p. 116 = *Phryganea alba* of Fabricius.

Coniopteryx aleurodiformis, *Id.* p. 116, is a new species.

Coniopteryx psociformis, *Id.* p. 117, is a new species.

PSOCINA.

Psocus pilicornis, *Id.* p. 117, male; *P. picicornis*, *Id.* p. 118, female; *P. fasciatus*, female; *P. varietus*, female; and *P. atomarius*, male = *P. variegatus* of Latreille.

Psocus maculatus, *Id.* p. 119, and *P. subfasciatus*, are male and female of a new species.

Psocus lineatus = *P. lineatus* of Fabricius.

Psocus nebulosus is a new species.

Psocus similis, *Id.* p. 120, is a new species.

Psocus bifasciatus, *P. contaminatus* and *P. megastigmus* constitute a species previously undescribed, for which the name of *bifasciatus* must be adopted.

Psocus subnebulosus, *Id.* p. 121, is a new species.

Psocus longicornis is a new species, and = the *Psocus Naso* of Rambur.

Psocus immunis is a new species.

Psocus venosus = *P. strigosus* of Curtis.

Psocus vittatus, *Id.* p. 122 = *P. vittatus* of Dalman.

Psocus ochropterus, *P. flavidus*, *P. flavicans*, *Id.* p. 123, and *P. obsoletus*, constitute a new species, for which the name of *ochropterus* must be adopted.

Psocus hyalinus, *P. bipunctatus*, *P. sexpunctatus* and *P. quadrimaculatus*, *Id.* p. 124 = *P. 4-maculatus* of Latreille.

Psocus striatus and *P. flavipes* constitute a new species, for which the former name must be adopted.

Psocus subocellatus, *P. quadripunctatus*, *Id.* p. 125, and *p. costalis*, p. 126 = *P. cruciatus* of Linneus.

Psocus immaculatus, *Id.* p. 125, *P. rufescens* and *P. flavescens* = *P. strigosus* of Curtis.

Psocus subpunctatus, *Id.* p. 126, is a new species.

Psocus nervosus is a new species.

Psocus maculipennis is a new species.

Psocus nigricornis, *P. phæopterus*, *Id.* p. 127, and *P. abdominalis*, constitute a new species, for which the name of *nigricornis* must be adopted.

Psocus nigricans = *P. domesticus*, *B.*

Psocus dubius is a new species.

Atropos pulsatorius = *P. pulsatorius* of Linneus.

Atropos fatidicus. The specimens thus named are the larva and pupa of a species of *Psocus*.

RAPHIDIINA.

Raphidia ophiopsis, *Id.* p. 130, and *R. megacephala* = *R. media* of Burmeister.

Raphidia londinensis = *R. Schneiderii* of Ratzeburg.

Raphidia affinis, *Id.* p. 131, and *H. maculicollis* = *R. ophiopsis* of Linneus.

Raphidia confinis = *R. xanthostigma* of Schummel.

Sialis lutarius, *Id.* p. 132 = *Hemerobius lutarius* of Linneus.

PERLINA.

Perla marginata, *Id.* p. 135 = *P. bipunctata* of Pictet.

Perla cephalotes, p. 136 = *P. marginata* of Pictet.

Perla bicaudata = *P. microcephala* of Pictet.

Isogenus Nubecula, p. 137 = *P. Nubecula* of Pictet.

Chloroperla fuscipennis, p. 138, *C. lateralis*, *C. media*, p. 139, *C. venosa* and *C. rufescens* = *P. Rivulorum* of Pictet.

Chloroperla flava and *C. pallida* = *Chloroperla apicalis* of Newman.

Nemoura nebulosa, p. 140, *N. fuliginosa*, p. 141, *N. pallida*, *N. cruciata*, *N. affinis* and *N. annulata*, p. 142, constitute together a new species, *N. nebulosa*.

Nemoura pusilla, p. 142, and *N. luteicornis* = *N. variegata* of Pictet.

Nemoura pallipes, p. 142, and *N. fumosa*, p. 143, constitute a new species, *N. pallipes*.

Nemoura pallicornis, p. 143, and *N. nitida*, constitute a new species, *N. pallicornis*.

Nemoura cambrica, p. 143, is a new species.

Nemoura fulvicollis is a new species.

Nemoura variegata, p. 144 = *N. nebulosa* of Pictet.

Leuctra geniculata, p. 145, is a new species.

Leuctra fusciventris = *L. cylindrica* of Pictet.

Leuctra abdominalis is a new species.

H. HAGEN.

Occurrence of Deilephila Euphorbiæ at Taunton.—Perhaps it may be worth recording that *Deilephila Euphorbiæ* was captured here two or three weeks ago. It is rather singular, as we are twenty miles from any sea coast, and more than that distance from any place likely to afford food for the larva. There is also a specimen in the collection (now in the Museum) of the late W. Baker, Esq., which I suppose to have been taken in this neighbourhood.—*W. G. Rawlinson; Taunton, October 21, 1857.*

Note on Pterophorus Loewii, Zeller, a Species new to Britain.—Last August, while at Southport, amongst other things I took a plume which I did not know. As I could not go again, I requested my friend Mr. Davis to take all the plumes he could for me, and shortly afterwards he sent me several specimens, evidently the same species as the one I took, but much finer; and I at once concluded it was a species new to our list. Having forwarded a pair of fine specimens to Mr. Stainton, he writes me, "Your plume, as you anticipated, is quite new to this country; it has hitherto only been found in Italy and at Rhodes."—*C. S. Gregson; Edge Lane, Stanley, Liverpool, November, 1857.*

Capture of Hydroporus ferrugineus.—On the 10th of March, last year, I had the pleasure of taking, out of a horse-pond near us, an interesting-looking *Hydroporus*, bearing some resemblance to a pale specimen of *memnonius*, yet in many points unlike anything I had previously picked up, either in this neighbourhood or anywhere else. On referring to the descriptions in Stephens's 'Manual' of the species still unrepresented in my collection, I found that that of *H. ferrugineus* came nearest the characteristics of the little stranger; but, for the sake of greater certainty, the specimen was submitted to the scrutiny of Dr. Power, whom I, like the editor of the 'Zoologist,' delight in regarding as "the referee from whose decision in such cases there is no appeal." After comparing the Scotch insect with the specimen in Stephens's cabinet, his verdict was "Not ferrugineus." Some time ago I fell in with Aubé's description of *H. Victor*, which Dr. Schaum, in his 'Revision of the British Hydrocantharidæ' (Zool. 1887), gives as a synonym of *H. ferrugineus*, and little doubt was thereafter left on my mind that I had found the insect's name as well as its local habitation. Both Dr. Schaum, to whose labours British entomologists are largely indebted, and Dr. Power have homologated my conclusion; the former, however, still believing that he is correct in his statement as to the synonymy. This, as he observes, may be easily reconciled with the opinion of the latter, by supposing that the original specimen of *H. ferrugineus* has been inadvertently misplaced. Still it might be asked, With what has it changed place? This rare species, which my friend the Rev. Hamlet Clark, who has given so much attention to our native water beetles, has not met with in any of the collections with which he is acquainted, has occurred again, sparingly, this summer, but not in the horse-pond, notwithstanding many an anxious search. The truth is, stagnant water does not seem to be its element, any more than the salt water was to the insects found by Mr. Darwin off the coast of South America. It delights in streams, and companies with *H. Davisii*, *Agabus guttatus* and *A. font-*

nalis, of which I have at length obtained a full series, and some to spare. After my attention had been drawn to this prized addition to our Scotch Hydropori, I detected a specimen in Mr. Young's collection of Renfrewshire Coleoptera, and Dr. Power informs me that has found another in the cabinet of Mr. Syme, who probably took he it near Dollar.—*R. Hislop; Blair Lodge, Falkirk, November 10, 1857.*

Locusts in Leicestershire.—During the recent flight of locusts several were taken in different parts of this county; one at Wymeswold, a second at Little Glen, and a third at Smeeton, Westerby, about a mile from hence.—*Alfred Merle Norman; Kibworth, Leicestershire, November, 1857.*

Note on the Occurrence of the Honey Buzzard near Lowestoft.—About six weeks since a male specimen of the honey buzzard was killed at Somerleyton, near this place, on the estate of Sir S. Morton Peto, Bart., a locality where this species has not unfrequently occurred on previous occasions. The present specimen appears by its plumage to be a bird of the second year.—*J. H. Gurney; Lowestoft, October 26, 1857.*

Occurrence of the Great Snipe at the Land's End.—A specimen of the great snipe (*Scolopax major*) was killed at St. Levan, near the Land's End, last week; it was in a very emaciated state. The occurrence of the solitary or great snipe is so rare in the western counties that each example deserves a record.—*Edward Hearle Rodd; Penzance, November 2, 1857.*

On Preserving Sea Anemones.—In answer to the application in the last number of the 'Zoologist' as to the best method of preserving the Actiniæ for the cabinet, I beg to enclose you an extract from the admirable 'Manual of Scientific Enquiry,' p. 361; it is published by Murray. I should recommend all who are interested in Science to purchase a copy. "Sea anemones must be preserved entire, in alcohol or saline solution, and of the latter the following (No. 1 of Goadley's solutions) has been found successful:—

Bay Salt	4 oz.
Alum	2 oz.
Corrosive sublimate	2 grains
Rain water	1 quart

In order to preserve the specimens expanded they must be removed, and placed alive in a dish of sea water, and when they have protruded and expanded their tentacles the solution should be slowly and quietly added to the sea water, when the animal may be killed, and fixed in its expanded state. So preserved, the specimens should be transferred to a bottle of fresh solution."—*William Thompson; Weymouth, November 5, 1857.*

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Madeiran Coleoptera.

THOSE ENTOMOLOGISTS to whom *typical* Specimens have a peculiar interest are informed that the duplicates of the Collection from which the 'Catalogue of Madeiran Coleoptera' was lately prepared for the British Museum have been distributed into *five sets*, which are now offered for sale at £10 each. They may be procured from E. W. Janson, Esq., 61, Gracechurch Street, London; and may be viewed every Monday afternoon, by application to him at the rooms of the Entomological Society, 12, Bedford Row. Four of the sets contain 220 species (equal to 688 specimens) in each, and the fifth contains 250 species (equal to 750 specimens); and in order to equalise them as far as was possible *two* bound copies of the Topographical Catalogue and Introductory Observations, constituting the preliminary portion of the 'Insecta Maderensia,' have been given with each of the "four" sets mentioned above; as also two copies of the Topographical Catalogue, printed on one side only, for labelling. The "two" Catalogues have been furnished with each, in order to facilitate the sale, in the event of persons wishing to join in obtaining any one of the sets; *for, wherever it was possible, sufficient specimens* (often amounting to 8 or 9 in number) *have been added of the various species to supply more than a single Collection.* Each batch is packed into a green store-box; and the species, a great proportion of which are peculiar to the Madeira Islands, are principally from amongst the smaller tribes.

To Egg Collectors.

MR. J. C. STEVENS is instructed to announce for Sale by Auction, during the coming year, a COLLECTION of EGGS formed in ALGERIA during the past Summer, by the Rev. H. B. TRISTRAM, and containing many *rare* and *well-authenticated* Specimens, including those of *Vultur fulvus*, *Falco imperialis*, *F. pennatus*, *Strix scops*, *Cuculus glandarius*, *Sylvia galactodes*, *Hemipodius tachydromus*, *Otis houbara*, *Ardea garzetta*, *Anas rutila*, *A. rufigula*, &c., &c. Further notice of the Sale will be given.

38, King Street, Covent Garden, London, W.C.—November, 1857.

To Entomologists.

JAMES ARGENT, 32, Bishopsgate Street Without, begs to inform his friends that he has received this year an unusual number of British Lepidoptera, in the finest possible condition, and is enabled to offer them at the following much-reduced prices:—

Phlogophora empyrea. 12s. each.

Pionea margaritalis. 3s. each.

Lithosia muscerda. 2s. each.

Colias Hyale and *Ægeria Bembeciformis*. 1s. 6d. each.

Satyrus Davus, *C. Edusa*, *L. Trifolii*, *A. Menyanthes*, *Euthemonia Russula*, *Gastropacha Quercifolia*, *Larissa imbutaria*, *Melitæa Cinxia* and *Ægeria Apiformis*. 1s. each.

Pionea stramentalis. 9d. each.

Pyrallina, *Lucina*, *Actæon*, *Adonis*, *Athalia*, *Paniscus*, and many others, at 6d. each.

32, Bishopsgate Street Without, N.E.

G. H. KING, 158, Higher Union Street, Torquay, in returning his thanks to the gentry and others for the patronage they have kindly bestowed on him, begs to inform them that he has now on hand a stock of

P. empyrea, 10s. each. *D. Templi* and *C. obtusellus*, 5s. each. *H. hispidus*, 3s. 6d. each. *P. bractea*, 2s. each. *A. australis* and *L. phragmitella*, 1s. each. *S. conspicuaria* and *P. stramentalis*, 9d. each. *P. flavalis* and *S. angustalis*, 6d. each. Also *Chrysophanus Hippothoe* and several other rare and valuable Insects, all collected this season, in the fens and other localities.

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